



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
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ANN ARBOR, MICHIGAN 48105-2498

June 12, 2003

CCD-03-06 (LDV/LDT/ICI/LIMO)

Dear Manufacturer:

OFFICE OF
AIR AND RADIATION

SUBJECT: Fuel Economy Label Information for 2004 Model Year

Enclosed with this letter are the following documents designed to guide you in your 2004 model year fuel economy program.

Enclosure 1

"Fuel Economy Supplementary Information for 2004 Model Year" contains the fuel cost, Gas Guzzler Tax schedule, and fuel economy range information necessary to print the fuel economy labels.

Enclosure 2

Enclosure 2 provides instructions for submitting information to EPA for the Guide for alternative-fueled vehicles, electric vehicles, minivans, and sport utility vehicles.

Enclosure 3

Enclosure 3 is a "timetable" which contains the timetable for inclusions of label values in the 2004 model year Fuel Economy Guide.

This letter establishes official 2004 model year fuel costs which are different than the interim values used by some manufacturers. [Interim fuel costs are used when 2004 vehicles are offered for sale before the 2004 fuel costs are available.] Manufacturers may continue using interim values (i.e. 2003 values) on currently approved labels until September 1, 2003. Manufacturers may update their currently approved labels sooner. All labels approved after July 1, 2003 should use the new fuel costs.

If you have any questions, please contact your certification team representative.

Sincerely,

Gregory A. Green, Director
Certification and Compliance Division
Office of Transportation and Air Quality

Enclosures

cc: John Millhone, DOE

ENCLOSURE 1

Fuel Economy Supplementary Information for 2004 Model Year

Annual Fuel Cost Estimates

Annual fuel cost estimates used on fuel economy labels (window stickers of new vehicles) are based on the following fuel costs:

Regular Unleaded Gasoline	\$1.40 per gallon
Premium Unleaded Gasoline	\$1.60 per gallon
Diesel Fuel	\$1.35 per gallon
E85	To be determined
LPG	To be determined
CNG	To be determined
Electricity	\$0.05, 0.10, 0.15 per kilowatt-hour

The annual fuel cost estimations should be calculated based on 15,000 annual vehicle miles, the above listed fuel cost and the adjusted combined mpg (.55/.45 weighting of the adjusted city and highway FE's, then rounded to a whole mpg). Fuel cost for electric vehicles should be shown for the three electricity costs, because of the wide range of electricity costs throughout the United States.

The fuel cost forecasts of E85, LPG and CNG are not available at this time. These fuel costs will be provided in a separate EPA guidance letter in a near future.

Fuel Economy Ranges

The publication of the initial ranges as required by 40 CFR 600.314-86(d), will occur at the same time the Guide is released for publication. These ranges shall be applied to all vehicles manufactured more than 15 days after the ranges are available [Ref.: 40 CFR 600.306-86(b)].

Pursuant to 40 CFR 600.314-86(d), we will publish an updated version of all the ranges in February, 2004. This corresponds to the historical date of the second edition of the Guide. All vehicles must be labeled with the updated ranges within 15 days.

Labels issued after release of the initial or updated ranges should include the latest available range of fuel economy for that class of vehicle. After the ranges are initially available, the computer issued receipt will contain the ranges. The receipt will be automatically generated for manufacturers electronically transmitting FE data; other manufacturers can obtain this receipt from your certification team representative after the FE data has been entered. Separate ranges of adjusted city and highway FE values will be given.

EPA/DOE Printed Fuel Economy Guide

It is EPA's intention to include in the printed Guide all manufacturers' label values according to

the schedule contained in Enclosure 3. If a manufacturer wishes to exclude a model type from the Guide, a request providing justification for the exclusion must be submitted in writing to EPA. EPA sends all available fuel economy label values to DOE for printing, on the date indicated in Enclosure 3. [DOE is responsible for printing and distributing the Guide.] DOE normally mails the printed Guide to automobile dealerships, libraries, credit unions, etc., in October or early November.

EPA and DOE will not publish a printed copy of the second edition of the Guide in February, as has been done in the past. Instead, we will update the web site (www.fueleconomy.gov) several times during the year.

Release Date

EPA will consider fuel economy label values as confidential until the release date specified by the manufacturer. Normally, manufacturers should enter a release date in the CFEIS database corresponding to the date when the vehicle will be introduced to the public. As indicated above, the printed Guide will normally include all fuel economy label values in the EPA database, regardless of the manufacturer's release date, when EPA forwards the label values to DOE.

EPA Press Release

Each year, EPA releases the Fuel Economy Guide to the press around the time new models are first offered for sale. Our press release typically occurs in the last part of September or early October, and typically includes all the information in the printed Guide, plus some general information about some of the highest and lowest fuel economy cars and trucks.

EPA/DOE Fuel Economy Web Site (www.fueleconomy.gov)

The EPA and the Department of Energy (DOE) maintain a website devoted to fuel economy: www.fueleconomy.gov. The web site contains all the information in the printed Guide, plus tips and other general information about the fuel economy of passenger cars and light trucks. After the EPA press release, EPA will place a copy of the updated Guide information on the web site. The site is updated periodically throughout the year as new models are added.

EPA encourages automobile manufacturers (and dealers) to link their web sites to the EPA/DOE site, as a public reference for fuel economy of passenger cars and light-duty trucks.

Green Vehicle Guide (www.epa.gov/greenvehicles)

EPA will post the 2004 certification and fuel economy information on the Green Vehicle Guide in mid-October. We will assume that the fuel economy data released in the Fuel Economy Guide is complete and accurate. Manufacturers should confirm that their certification emission standards for each test group are accurate (both the numeric value and the emission constituent names.)

Displaying Web Site Address on FE Labels (Window Stickers)

EPA requests that manufacturers include the EPA/DOE web site address

(www.fueleconomy.gov) in a highly visible place on the label, preferably on the border of the label, in lower case letters which are in the same bold condensed type as the words "FREE FUEL ECONOMY GUIDE."

Gas Guzzler Tax

If, according to your calculations, one or more of your model types are subject to the Gas Guzzler Tax, those model types are noted by the letter "G" in the engine description section of the Fuel Economy Guide.

The total amount of tax is determined by the Internal Revenue Service (IRS). The manufacturer is responsible to the IRS for reporting and paying the Gas Guzzler Tax. The tax schedule shown in the 40 CFR 600.513-91 must be used on the label unless the manufacturer has been granted an alternative tax rate schedule. However, the IRS may audit your records and make their own determination about your tax liability. If the IRS determines a different tax rate after the model year, you will not be required to re-label unsold vehicles.

Limousine Manufacturers

Under the Revenue Consolidation Act of 1991, limousine manufacturers or modifiers are subject to the gas guzzler requirements. Manufacturers or modifiers of such vehicles should obtain fuel economy labels for their vehicles and conversions and pay the appropriate tax to the IRS.

ENCLOSURE 2

Additional Instructions for Submitting Fuel Economy Information to EPA for the 2004 Fuel Economy Guide

1. Background Information

For the 2004 Guide, EPA will list all gasoline, diesel and alternative fuel vehicles together. This will help consumers to find alternative fuel vehicles and compare their fuel economy with gasoline vehicles more conveniently through "one stop shopping."

As in the 2003, the Fuel Economy Guide will also separately list vehicles operated on the following fuels:

Diesel fuel
Ethanol (E85)
Compressed Natural Gas (CNG)
Electricity
Other Alternative Fuels

For dual-fueled vehicles, the gasoline mpg values for the vehicle will be listed in both the Gasoline section of the Guide and the appropriate alternative-fuel section of the Guide.

2. Subdividing "Special Purpose Vehicles" into Minivans and SUVs

As an aid to consumers, the 2004 Fuel Economy Guide will subdivide the Special Purpose Vehicle class into the following sub-categories:

Special Purpose Vehicle - Minivan - 2WD;
Special Purpose Vehicle - Minivan - 4WD;
Special Purpose Vehicle - Sport Utility Vehicle - 2WD; and
Special Purpose Vehicle - Sport Utility Vehicle - 4WD.

Manufacturers should subdivide their Special Purpose Vehicles into Minivans and Sport Utility Vehicles (SUVs) by entering the appropriate carline class code into the carline program of the EPA database (column 21-22 of the CI record). With EPA approval, a vehicle may continue to be listed in the Guide as a "Special Purpose Vehicle" if it does not seem to fit into one of these subcategories. This situation is expected to be rare, but may occasionally happen for some types of camper vans, dune buggies, amphibious vehicles, or other special vehicles.

Please note that the subcategories of "Special Purpose Vehicles" will be used in the Guide only, and should not be used on the fuel economy label (window sticker) required by the provisions of 40 CFR 600.306-86. As in previous years, the fuel economy labels for most Minivans and SUVs should identify these vehicles as "Special Purpose Vehicles." Similarly, EPA will provide fuel economy ranges of comparable vehicles for "Special Purpose Vehicles" only, and not for any of

the subcategories.

3. Guidance for Listing Vehicles Equipped with Semi-Automatic Transmissions in the Guide

If you are planning to incorporate any semi-automatic transmissions¹ or automatic variable gear ratio transmissions (continuously variable transmissions) in your product plans, when filling out the general label information in the CFEIS Manufacturers Users Guide (CMUG), please mark them with the appropriate code for the General Label input data G2 record, position 7-8, as shown below. However, for the Vehicle Information input record (V5 record, column 52-53) the transmission code should indicate how the vehicle is actually tested, i.e. in the automatic or manual mode.

- AV - Automatic Variable Gear Ratios
- A1 - No Lockup/Automatic/1-speed
- A3 - No Lockup/Automatic/3-speed
- A4 - No Lockup/Automatic/4-speed
- A5 - No Lockup/Automatic/5-speed
- A6 - No Lockup/Automatic/6-speed
- B3 - Both C4 & M3
- B4 - Both C5 & M4
- C4 - Creeper/Manual 4-speed
- C5 - Creeper/Manual 5-speed
- L1 - Lockup/Automatic/1-speed
- L3 - Lockup/Automatic/3-speed
- L4 - Lockup/Automatic/4-speed
- L5 - Lockup/Automatic/5-speed
- L6 - Lockup/Automatic/6-speed
- M3 - Manual 3-speed
- M4 - No Creeper/Manual 4-speed
- M5 - Manual 5-speed
- M6 - Manual 6-speed
- S2 - Semi-Automatic 2-speed
- S3 - Semi-Automatic 3-speed
- S4 - Semi-Automatic 4-speed
- S5 - Semi-Automatic 5-speed
- S6 - Semi-Automatic 6-speed

4. Guidance for Listing Alternative-Fueled Vehicles in the Guide

The Fuel Economy Guide includes new alternative-fueled vehicles, such as CNG vehicles,

¹ A semi-automatic transmission is a transmission which can easily be shifted in either the automatic or manual mode. For example, some semi-automatic vehicles can be shifted by (+/-) buttons located on the steering wheel; a stalk or paddles located on the steering column; or by placing the floor mounted shift lever in a special (+/-) position which transforms the gear lever into a toggle switch that is designed to perform up shifts and downshifts manually.

ethanol vehicles and other types of alternative-fueled vehicles. For CNG and ethanol vehicles manufacturers should enter the fuel economy label values of these alternative-fueled vehicles into the EPA computer database, listing the EPA driving range in the engine block descriptor field (G1 record column 47-56). For LPG (propane) and electric vehicles, manufacturers should provide the necessary fuel economy information, driving range information, and a description of the vehicles to EPA in writing to the attention of their EPA certification team member. If the city and highway fuel economy values and driving range will not be available by August 28, manufacturers should submit a description of the vehicle to their EPA team member with the fuel economy and driving range listed as "NA" (not available).

For dual-fueled vehicles, manufacturers should provide fuel economy (mpg) values when the vehicle is operated on both fuels. For example, manufacturers should provide both gasoline and ethanol (E85) mpg values for flexible-fueled ethanol vehicles.

Manufacturers should provide the EPA driving range of dedicated alternative-fueled vehicles (rounded to the nearest 10 miles). For dual-fueled vehicles, manufacturers should provide the driving range of the vehicle when operated on gasoline or diesel fuel and the driving range when operated on the alternative fuel.

The EPA driving range should be based on the adjusted combined fuel economy value as determined in 40 CFR 600.209-95(d) and the nominal fuel tank capacity of the vehicle (rounded to the nearest tenth of a gallon). If several fuel tank capacities are available for a vehicle, manufacturers should provide the driving range and the fuel tank capacity for all available fuel tank capacities for the vehicle.

For CNG vehicles, manufacturers should provide the city and highway fuel economy values in miles per gallon-equivalent, where one gallon-equivalent is equal to 121.5 cubic feet of CNG. The CNG fuel tank capacity used to calculate the EPA driving range should be based on 80 percent of the nominal fuel tank capacity (using a slow fill rate) in order to account for the reduced fuel tank capacity which results from a fast fill rate.

5. Guidance for Listing Electric Vehicles in the Guide

The Fuel Economy Guide will include a separate section for new electric vehicles. If manufacturers have not already done so, they should provide a list of electric vehicles which will be introduced into commerce in the next year. If the energy consumption and driving range will not be available by August 28, manufacturers should submit a description of the vehicle with the energy consumption and driving range values listed as "NA" (not available). Manufacturers should provide the description of the vehicles to EPA in writing to the attention of their EPA certification contact, including the city and highway energy consumption (in kW-hr per 100 miles); and the range of the vehicles (in miles). The energy consumption and the range should be calculated using the procedures contained in Society of Automotive Engineers procedure J1634. The EPA driving range (in miles) is the harmonic average of the city driving range and the highway driving range, weighted 55% city and 45% highway, rounded to the nearest mile as follows:

$$\text{EPA Driving Range (in Miles)} = \frac{1}{\frac{0.55}{\text{City Range}} + \frac{0.45}{\text{Hwy Range}}}$$

Please submit the information in the format shown in the example below:

Carline Name	Type of Battery	Motor Size/Type	Energy Consumption (kW-hr per 100 miles)		Driving Range	Veh.Class, Body Type, Pass/Cargo
			City	Hwy		
AB Electric	Lead-Acid	95 KW AC Induction	40	50	100	4dr-113/13 Large Cars
AB Electric	Nickel-Metal Hydride	45 KW AC Induction	45	45	150	4dr-113/13 Large Cars
CD Electric	Lithium-Ion	62 KW DC	NA	NA	NA	2 dr-85/11 Subcompact

Availability:

AB Electric vehicles are initially available to the U.S. Postal Service in California and Arizona only.

CD Electric vehicles will be available nationwide (initially for lease only) in the late fall of 2003.

Additional information may also be included if necessary to describe your vehicles.

ENCLOSURE 3

Timetable

This enclosure is the timetable for including data in the 2004 Fuel Economy Guide and for the calculation and release of updated fuel economy ranges:

Fuel Economy Guide

Task	Significant Dates	Responsibility
1. Obtain EPA Certification for all model types to be included in the <u>Guide</u> .	August 17	Manufacturer
2. Enter all general label fuel economy values into EPA CFEIS database, for all model types to be included in the <u>Guide</u> .	August 17	Manufacturer
3. Compile a list (for each manufacturer) of descriptions fuel economy values, etc., of all model types to be included in the <u>Guide</u> and send to manufacturers for their review.	July 21 and August 18	EPA
4. Complete review of all information provided in "3" above and notify EPA of necessary corrections or concurrence.	August 22	Manufacturer
5. EPA will send the necessary information to DOE for printing.	August 28	EPA
6. EPA announces 2004 <u>Guide</u> via a Press Release	late September - early October	EPA

Fuel Economy Ranges

1. Release to manufacturers the fuel economy ranges to be used on fuel economy labels.	August 29	EPA
2. Ranges required to be included on labels as of this date.	September 14	Manufacturer

EPA will try to include all available information in the Guide, which is submitted to EPA prior to August 28, 2003. August 27, 2003 is the last day for manufacturers to make changes to the EPA computer database or to submit written fuel economy information to EPA for alternative-fueled vehicles and electric vehicles.